

same plants in spring is also principally due. Persoon, Banks, DeCandolle and other botanists, have more or less partaken of the popular feeling to which we have just referred, but they have all explained it in such a manner as to show that the black fruits of the graminicolous *Puccinæ* would be orange at the commencement of their development, and in this condition would have been taken for *Uredines*. None of these observers, I believe, have suspected the existence in this case of the phænomenon of dimorphism.

Now that the discoveries recently made in the history of the lower animals have shown what astonishing transformations their specific identity may undergo, these suppositions will be received, I imagine, with less prejudice, especially as they are already supported by a sufficient number of facts to remove a great deal of their apparent temerity. I have moreover great reason to hope that new observations will soon confirm them.—*Comptes Rendus*, 24th April, 1854, p. 761.

METEOROLOGICAL OBSERVATIONS FOR MAY 1854.

Chiswick.—May 1. Rain. 2. Rain: low white clouds. 3. Cloudy. 4. Very fine. 5. Foggy: very fine. 6. Cloudy: uniformly overcast: slight frost at night. 7. Fine: rain. 8. Heavy rain. 9. Showery: thunder, with heavy showers. 10, 11. Cloudy. 12. Foggy: very fine: boisterous at night. 13. Fine. 14, 15. Very fine. 16. White clouds: partially overcast: very clear: frosty. 17. Uniform haze: clear, with very dry air: overcast. 18. Uniformly overcast: clear at night: frosty. 19. Clear and fine. 20. Cloudless: very fine: clear. 21. Cloudy and fine: rain. 22. Densely clouded: rain. 23. Rain: fine: very clear. 24. Heavy showers: clear at night: frosty. 25. Fine: showers, partly hail: clear. 26. Heavy clouds: very fine: heavy rain at night. 27. Heavy rain: hail-storm, with thunder and lightning quarter to five P.M.: clear at night. 28. Fine: cloudy: showery: heavy rain. 29. Rain. 30. Overcast: rain: cloudy. 31. Very fine throughout.

Mean temperature of the month	50°·07
Mean temperature of May 1853	51·27
Mean temperature of May for the last twenty-eight years .	53·85
Average amount of rain in May	1·77 inch.

Boston.—May 1. Cloudy: rain A.M. 2. Cloudy: rain A.M. and P.M. 3. Cloudy: rain P.M. 4. Fine. 5. Cloudy: rain P.M. 6. Fine. 7. Cloudy: rain, with thunder and lightning A.M. and P.M. 8. Cloudy. 9. Cloudy: rain, with thunder and lightning A.M. and P.M. 10. Cloudy. 11. Cloudy: rain A.M. 12. Fine. 13. Cloudy. 14, 15. Fine. 16. Cloudy. 17. Fine. 18. Cloudy: rain A.M. 19, 20. Fine. 21. Cloudy. 22. Cloudy: rain A.M. 23. Rain A.M. and P.M. 24. Cloudy: rain A.M. 25. Fine. 26. Cloudy: rain A.M. 27. Cloudy: rain A.M. and P.M. 28. Fine. 29. Cloudy: rain A.M. 30. Cloudy: rain A.M. and P.M. 31. Cloudy.

Sandwich Manse, Orkney.—May 1. Clear A.M.: drops P.M. 2. Clear, fine A.M.: clear P.M. 3—5. Clear and fine A.M. and P.M. 6. Clear A.M.: rain P.M. 7. Clear and fine A.M. and P.M. 8. Clear, fine A.M.: cloudy P.M. 9, 10. Bright A.M.: showers P.M. 11. Bright A.M.: cloudy P.M. 12. Cloudy A.M. and P.M. 13. Bright A.M.: showers P.M. 14. Cloudy A.M.: drizzle, showers P.M. 15. Clear A.M. and P.M. 16. Drops A.M.: damp P.M. 17. Showers A.M. and P.M. 18. Clear A.M. and P.M. 19. Cloudy A.M. and P.M. 20, 21. Showers A.M.: cloudy P.M. 22. Cloudy A.M.: drops P.M. 23. Clear A.M. and P.M. 24. Bright A.M.: clear P.M. 25. Cloudy A.M.: rain P.M. 26—30. Cloudy A.M. and P.M. 31. Damp A.M.: drizzle P.M.

Mean temperature of May for twenty-seven previous years .	47°·98
Mean temperature of this month	48·39
Mean temperature of May 1853	49·67
Average quantity of rain in May for thirteen previous years .	1·68 inch.